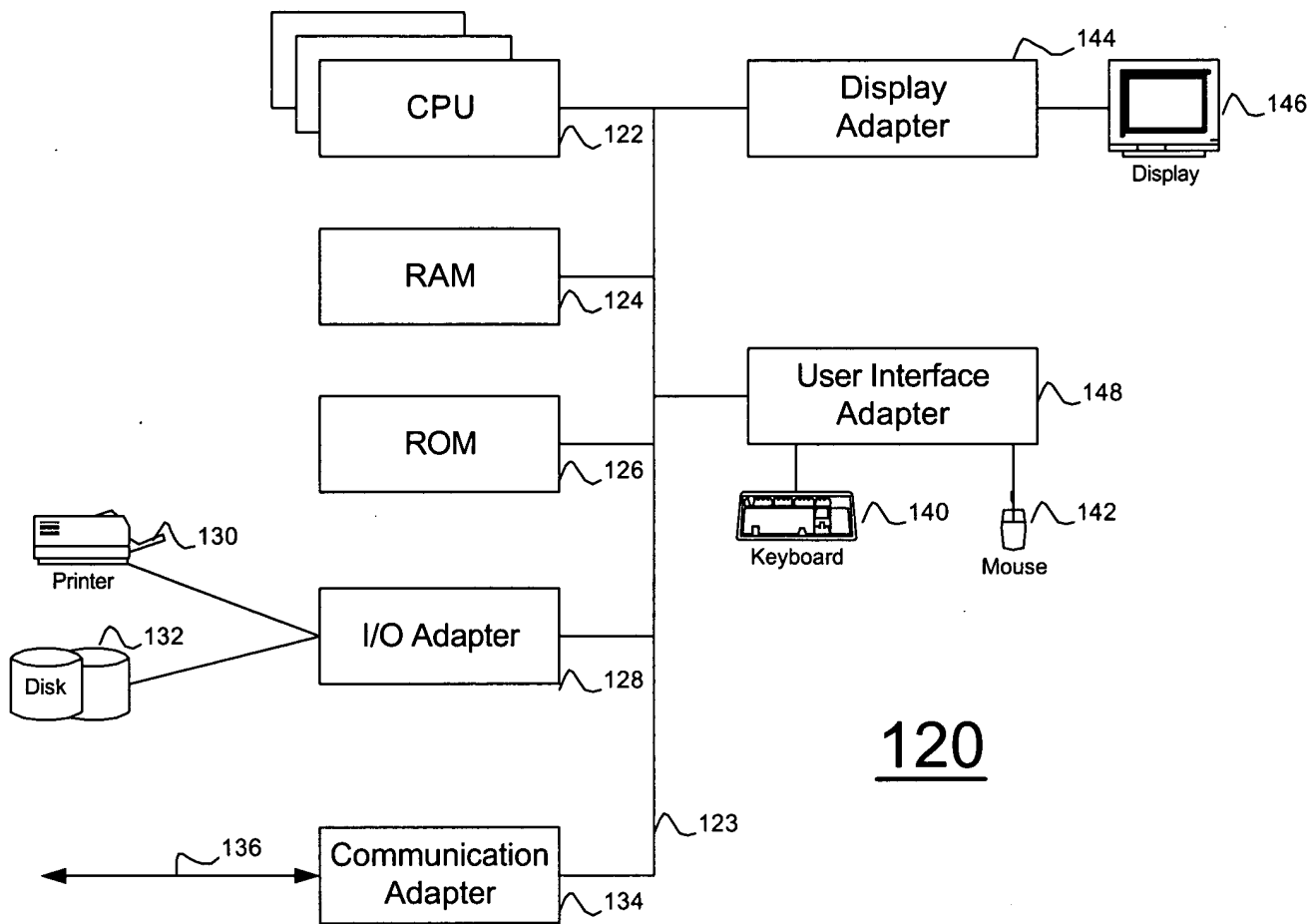
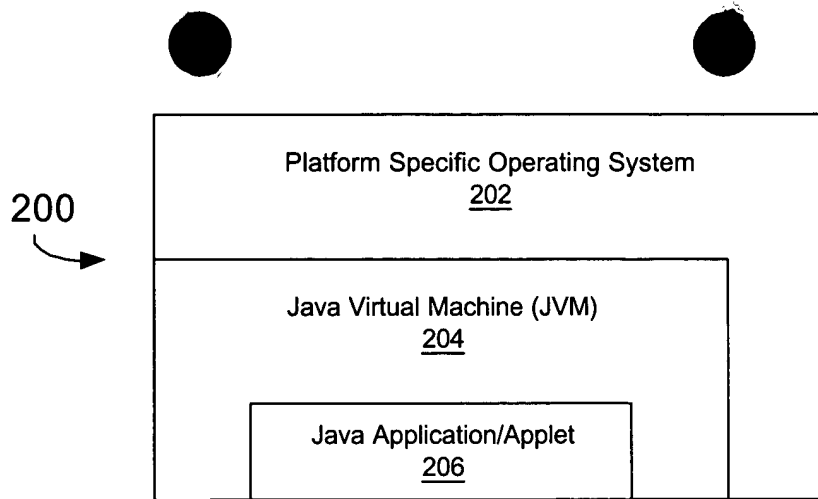


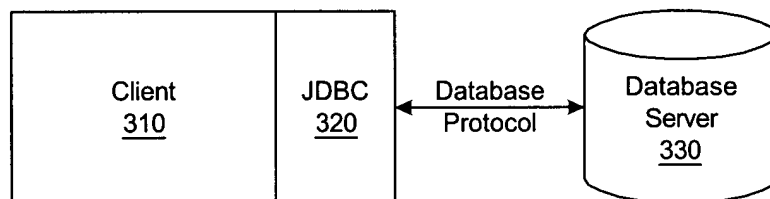
Prior Art
Figure 1A



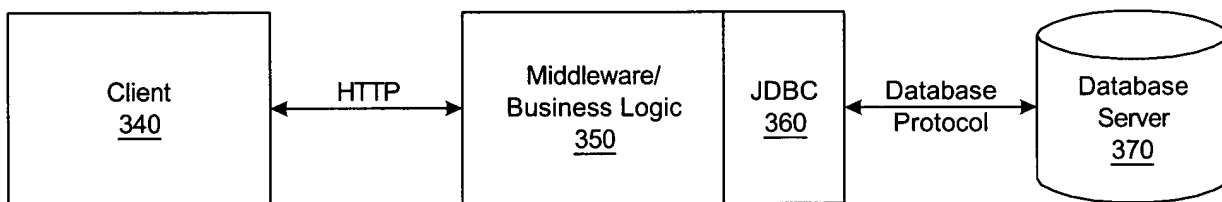
Prior Art
Figure 1B



Prior Art
Figure 2



Prior Art
Figure 3A



Prior Art
Figure 3B

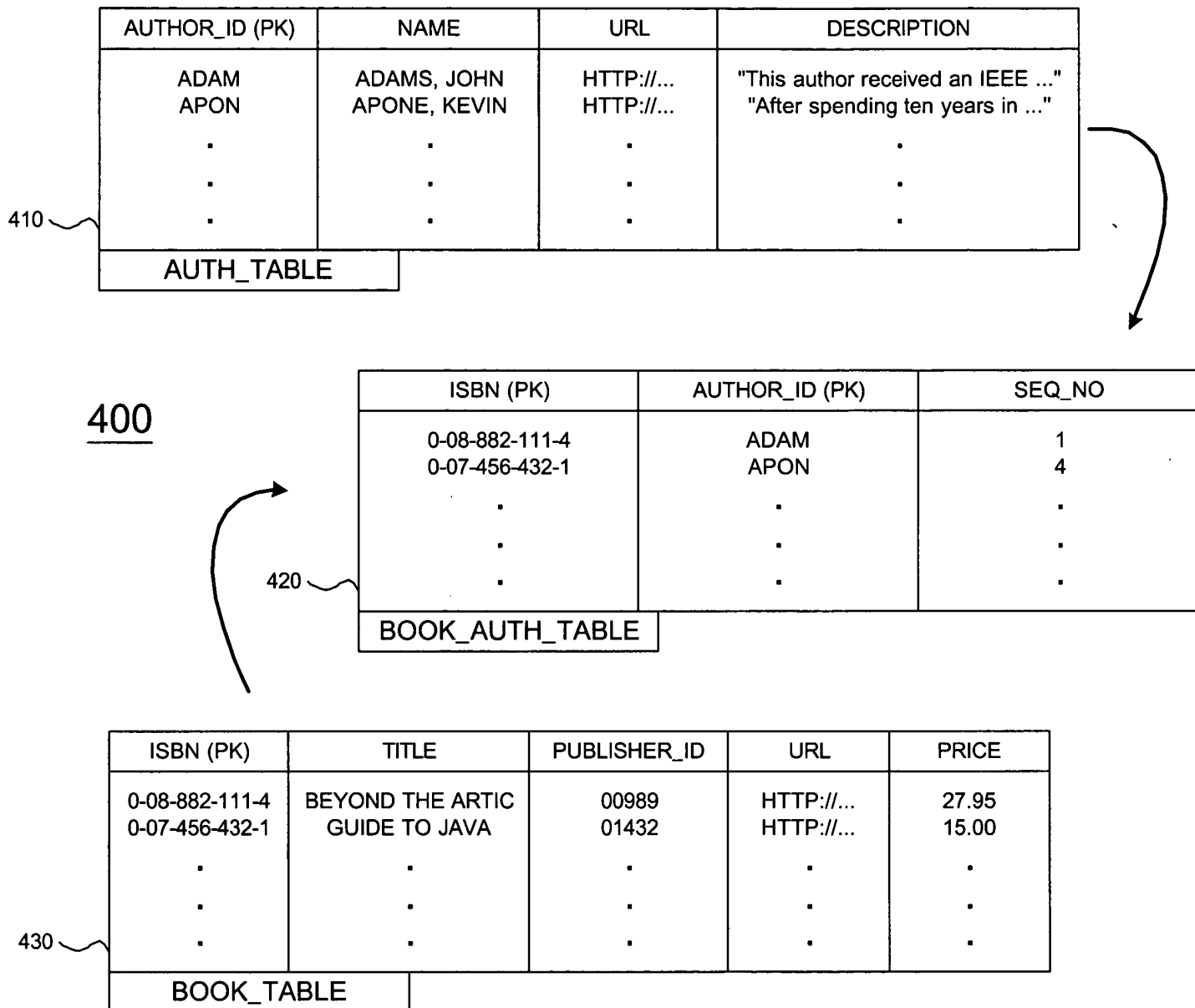


Figure 4

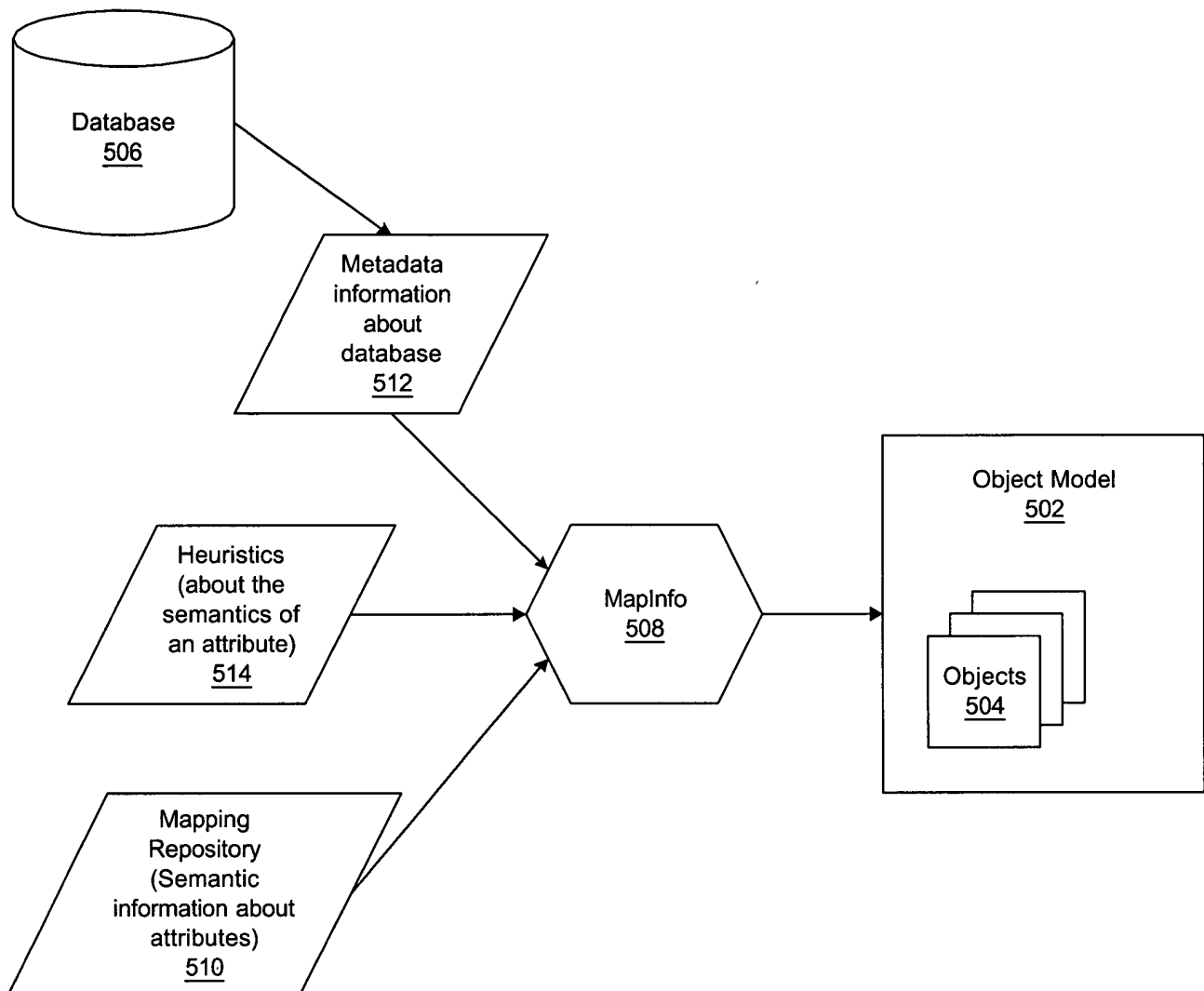


Figure 5

Java Class Definition

```
class Author {  
    private String m_author_id;  
    private String m_author_name;  
    private String m_url;  
    private String m_description;  
}
```

Figure 6A

```
<Table name="AUTH_TABLE" numattributes="4">  
    <PrimaryKey>  
        <Field name="AUTHOR_ID" pos="1">  
            <Type> VARCHAR2 </Type>  
            <Nullable> FALSE </Nullable>  
            <Length> 20 </Length>  
        </Field>  
    </PrimaryKey>  
    <Field name="NAME" pos="2">  
        <Type> VARCHAR2 </Type>  
        <Nullable> FALSE </Nullable>  
        <Length> 40 </Length>  
    </Field>  
    <Field name="URL" pos="3">  
        <Type> VARCHAR2 </Type>  
        <Nullable> FALSE </Nullable>  
        <Length> 1024 </Length>  
    </Field>  
    <Field name="DESCRIPTION" pos="4">  
        <Type> VARCHAR2 </Type>  
        <Nullable> FALSE </Nullable>  
        <Length> 512 </Length>  
    </Field>  
</Table>
```

Figure 6C

```
<MappingRecord classname="Author" >  
    <TableName> AUTH_TABLE </TableName>  
    <Attribute position="1">  
        <ClassField type= "String"> m_author_id </ClassField>  
        <DBField> AUTHOR_ID </DBField>  
        <Truncatable> NO </Truncatable>  
    </Attribute>  
    <Attribute position="2">  
        <ClassField type= "String"> m_author_name</ClassField>  
        <DBField> NAME </DBField>  
        <Truncatable> NO </Truncatable>  
    </Attribute>  
    <Attribute position="3">  
        <ClassField type= "String"> m_url</ClassField>  
        <DBField> URL </DBField>  
        <Truncatable> NO </Truncatable>  
    </Attribute>  
    <Attribute position="4">  
        <ClassField type= "String"> m_description</ClassField>  
        <DBField> DESCRIPTION </DBField>  
        <Truncatable> YES </Truncatable>  
    </Attribute>  
</MappingRecord>
```

Figure 6B

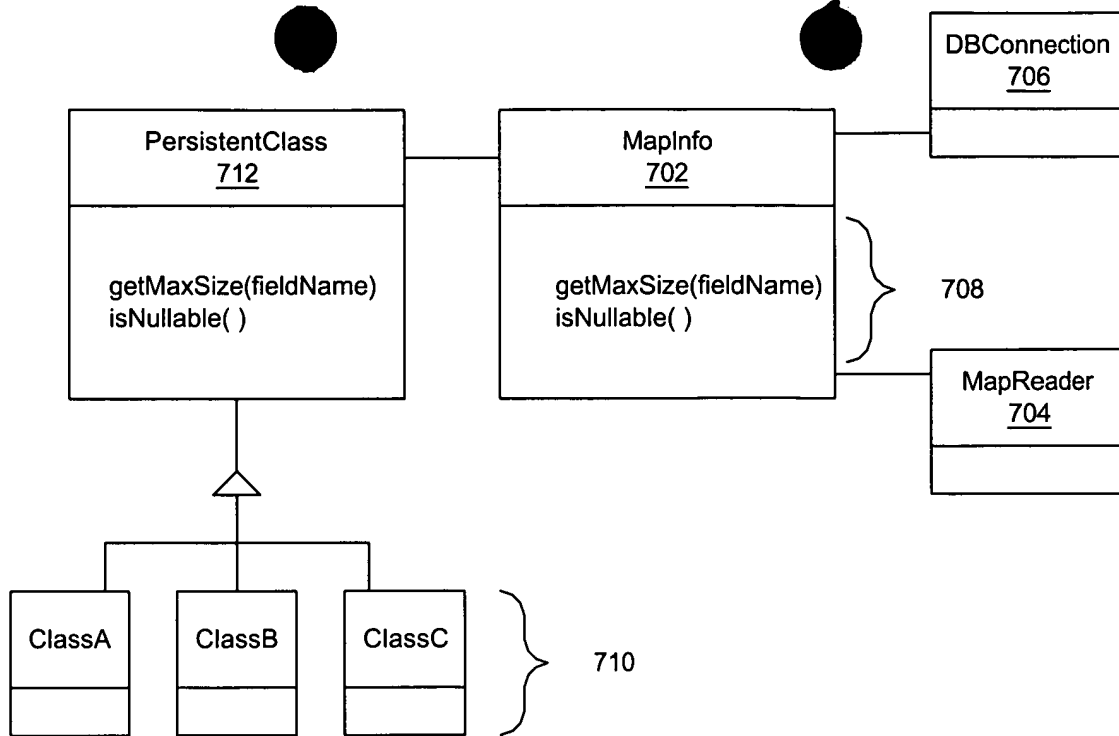


Figure 7

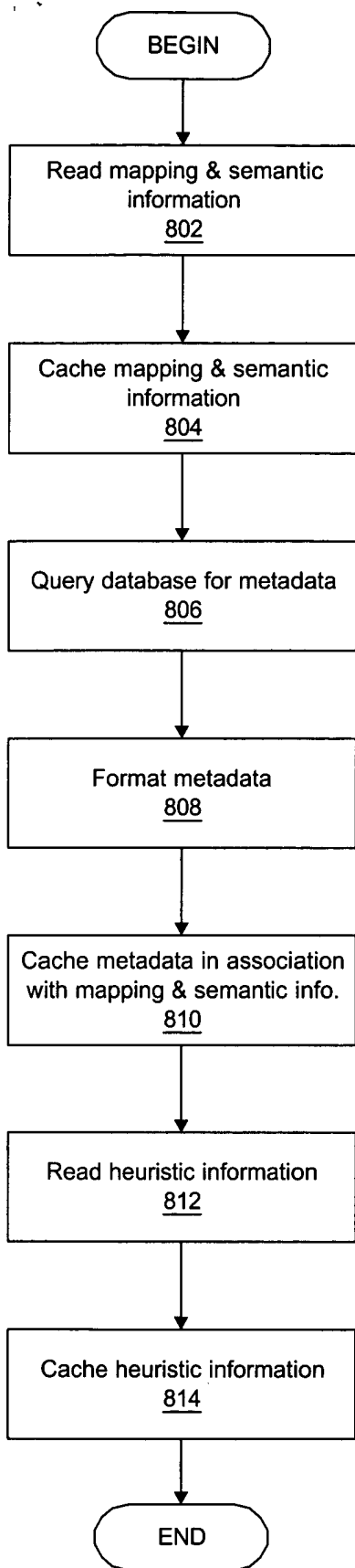


Figure 8A

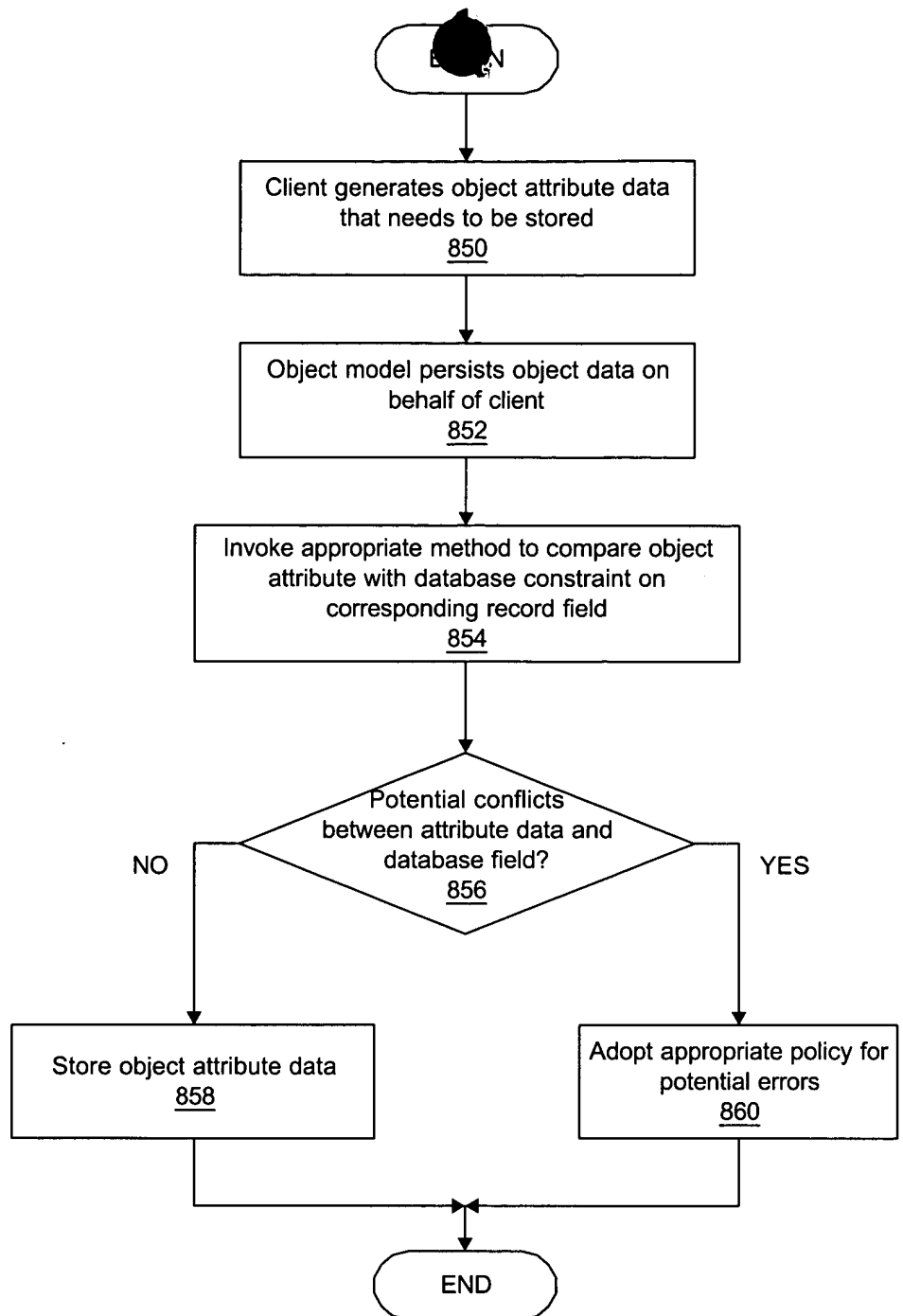


Figure 8B